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10/765,055	01/28/2004	Tetsuya Gotoh	248025US2CONT	2329
22850 7590 08/15/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
WASHINGTON, JAMARES				
ART UNIT		PAPER NUMBER		
2625				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/765,055

Applicant(s)

GOTOH ET AL.

Examiner

JAMARES WASHINGTON

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/986596.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SI/88)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Amendments and response received May 2, 2008 have been entered. Claims 1-12 are currently pending in this application. Claims 1, 2, 4 and 5 have been amended to further distinguish applicant's invention over the prior art of record. Claims 7-12 have been newly added by this amendment. Amendments and remarks are addressed hereinbelow.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/986596, filed on November 9, 2001, now U.S. Patent No. 6,709,176 B2).

Specification

The amended title is accepted and entered into prosecution. By this amendment, objection to the specification is withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Abraham J. Streefkerk et al (US 6058277).

Regarding claim 1, Streefkerk et al discloses a printing job controlling device (Fig. 1 numeral 107) configured to display a queue of printing jobs (Fig. 8 described at Col. 6 lines 24-29), comprising:

a calculating unit (Fig. 2 numeral 202) configured to calculate a time required to process a printing job (Col. 5 lines 1-4);

a reading unit (Fig. 2 numeral 202) configured to read out a current status of the printing job (Col. 4 lines 62-66 wherein the waiting time would indicate how long the print job would currently have to wait before being processed); and

a displaying unit (Fig. 2 numeral 201) configured to display an image having a size proportional to the time required calculated by said calculating unit and having a pattern that changes according to the current status read out by said reading unit (Col. 6 lines 1-11; Col. 5 lines 8-15 wherein the side of the circle segment (pattern) changes according to the status read out by the reading unit (c.g., time remaining before current print job is complete)).

Regarding claim 2, Streefkerk et al discloses a printing job controlling device (Fig. 1 numeral 107) configured to display a queue of printing jobs (Fig. 8), comprising:

a calculating unit (Fig. 2 numeral 202) configured to calculate a time required to process each of the printing jobs (Fig. 8 shows that the times for each printing job has been calculated); and

a displaying unit (Fig. 2 numeral 201) configured to display an image of a current print job having a size proportional to the time calculated by said calculating unit continuously on a predetermined displaying area at a fixed location (Fig. 8; Continuously updated as described for Fig. 7 at Col. 6 lines 3-5. The pie-shaped diagram shown in Fig. 4 (bottom right) is at a fixed location of the display area, therefore the current print job (408) is at a fixed location within the pie-shaped diagram irrespective of how the minute hand moves. The minute hand is not the current print job and the circle segment does not “move” around the circle. The location of this particular segment is fixed as indicated by the “anchor” side of the image segment at Col. 5 lines 13-15 wherein side 412 is fixed.),

at one end of the displaying area (Described in Fig. 7 wherein the current printing job is indicated by the "waiting time" until the next print job is printed, shown by numeral 701. Fig. 4 shows the graph at one end of the display area).

Regarding claim 4, Streefkerk et al discloses a method of displaying a queue of print jobs, comprising:

- calculating a time required to process a print job (Col. 5 lines 1-4);

- reading out a current status of the print job (Col. 4 lines 62-66 wherein the waiting time would indicate how long the print job would currently have to wait before being processed); and

- displaying an image having a size proportional to the time required (Col. 6 lines 1-11) and having a pattern that changes according to the current status (Fig. 7 shows the waiting time and job to be processed with differing patterns or colors; Col. 6 lines 1-3. Also see claim 1 wherein the pattern changes according to the current status).

Regarding claim 5, Streefkerk et al discloses a method of displaying a queue of print jobs, comprising:

- calculating a time required to process a print job (Fig. 8 shows that the times for each printing job has been calculated); and

- continuously displaying an image of a current print job having a size proportional to the time required at a fixed location on one end of a displaying area (see rejection of claim 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Streefkerk et al in view of Masashi Kuno et al (US 7283258 B1).

Regarding claim 3, Streefkerk et al discloses a method of displaying a queue of printing jobs (Fig. 8 described at Col. 6 lines 24-29), comprising:

a calculating times required to process print jobs (Fig. 8 shows that the times for each printing job has been calculated); and

continuously displaying images having sizes proportional to the times required on one end of a displaying area (Fig. 8; Continuously updated as described for Fig. 7 at Col. 6 lines 3-5).

Streefkerk et al fails to disclose or suggests the images proportional to the time calculated as rectangular images.

Kuno, in the same field of endeavor of utilizing a graphical display to indicate statistics of printing apparatuses (Fig. 11 indicating the ink amount left for each color in printing units), teaches a graphical display utilizing rectangular images (Fig. 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the controlling device configured to display a queue of printing jobs as disclosed

by Streefkerk et al to utilize rectangular images (bar diagram) as taught by Kuno to graphically show the user the processing time remaining for each print job with more accuracy given a pie chart (circular diagram) may have two or more portions which appear to be similar.

Regarding claim 6, Streefkerk et al discloses a method of displaying a queue of print jobs, comprising:

calculating times required to process print jobs (see rejection of claim 3); and
continuously displaying rectangular images having sizes proportional to the times required (see rejection of claim 3).

Regarding claim 7, Streefkerk et al discloses the printing job controlling device according to claim 3 (see rejection of claim 3 above).

Streefkerk et al fails to disclose or fairly suggest wherein the displaying unit is further configured to display the rectangular images adjacent to each other to form a combined rectangular image. Kuno et al fails to cure these deficiencies.

However, Streefkerk teaches displaying processing times of multiple print jobs in the form of a pie-shaped diagram with the jobs situated adjacent one another (Fig. 8) to give the user an indication of how much time will be needed to process and/or print all current and remaining jobs in the queue. Kuno et al teaches information represented in the form of a bar graph (rectangular images). It would have been obvious to situate the rectangular images taught by Kuno et al adjacent one another for displaying the information of Streefkerk wherein current and

future print job processing times are displayed in graphical form to give an overall indication of the processing time required for printing the queue in its entirety.

The modification of Kuno et al to rearrange the rectangular images adjacent one another as disclosed by Streefkerk would have constituted the mere arrangement indicated above with each performing the same function it had been known to perform, the combination yielding no more than one would expect from such an arrangement.

Regarding claim 8, Streefkerk et al discloses the printing job controlling device according to claim 7, wherein the displaying unit is further configured to display the combined rectangular image (see rejection of claim 7), wherein the area of the combined rectangular image is approximately equal to a sum of areas of the rectangular images (It is common sense that the area of combined graphical images would equal or be a close approximation of the individual areas of the images used to make up the combined image. Streefkerk shows in Fig. 8 that the combined pie-shaped images are equal to each individual pie-shaped image summed. Applying this principle to the rectangular images rejected in claim 7 would yield predictable results of aligning the rectangular images lengthwise, one in front of the other to get a total time for processing all jobs in the queue. This scenario would be obvious to one of ordinary skill in the art to try, choosing from a finite number of identified, predictable solutions).

Regarding claim 9, Streefkerk et al discloses the printing job controlling device according to claim 8, wherein the displaying unit is further configured to display the combined rectangular image with a horizontal dimension larger than a vertical dimension (see rejection of claim 7

wherein it would be obvious for one of ordinary skill in the art to try the claimed subject matter wherein the rectangular images are situated lengthwise to easily indicate the amount of time needed to process/print the entire print queue. This would cause the horizontal dimension of rectangular images, placed lengthwise, to be larger than the vertical dimension).

Regarding claim 10, Streefkerk et al discloses the method according to claim 6 (see rejection of claim 6), further comprising forming a combined rectangular image by displaying the rectangular images adjacent to each other (see rejection of claim 7).

Regarding claim 11, Streefkerk et al discloses the method according to claim 10, wherein the area of the combined rectangular image is approximately equal to a sum of areas of the rectangular images (see rejection of claim 8).

Regarding claim 12, Streefkerk et al discloses the method according to claim 11, wherein the combined rectangular image has a horizontal dimension larger than a vertical dimension (see rejection of claim 9).

Response to Arguments

5. Applicant's arguments filed May 2, 2008 have been fully considered but they are not persuasive.

Applicant's remark: The '277 patent is silent on a pattern that changes according to the current status read out by said reading unit.

Examiner's reply: Examiner disagrees. Applicant has stated in later remarks that "A pie-shaped image segment representing the waiting time of a current job is displayed on the pie chart...The side 409 of the circle segment moves with the minute hand... this causes the image to move according to the current time displayed by the hands of the clock superimposed on the display". This contradicts the present stance that Applicant is taking arguing that the patten does not change according to the current status read out by the reading unit. Streefkerk clearly shows as the current job is printing the image displayed changes to indicate the remaining time of the print job (See Col. 6 lines 3-14). Therefore, Streefkerk et al discloses a pattern that changes according to the current status read out by said reading unit.

Applicant's remark: The '277 patent does not describe displaying an image of a current printing job *at a fixed location* because the "initial position of the pie-shaped image segment representing the waiting time of a current job is not fixed, but changes based on current time shown by the hands of the clock". "The side 409 of the circle segment moves with the minute hand".

Examiner's reply: Examiner disagrees. The actual "image of the pie-shaped chart" is fixed at a particular location. The "pie sliced" shapes within the image of the pie-shaped chart change as the processing time changes for each print job, which coincides with the changing rectangular images of the present application. Furthermore, Applicant has not pointed out a particular section in the specification to explain his/her interpretation of "at a fixed location". Examiner has shown how the current references applied behave in the same manner as the claimed invention.

Applicant's remark: The '277 patent teaches against using a bar diagram. The '277 patent describes circular shaped images to display the waiting time of print jobs. In fact, the '277 patent shows a clear preference for the circular shape, and compares it to alternatives. The '277 patent states "the invention utilizes a display adapted to display a segment of a circle." "A graphic representation of this kind for the order processing [of] time signals makes it much easier for a user to rapidly gain an idea of the values thereof." "The shape also intuitively links up with an

analogue clock and hence the interpretation is also apparent. This is in contrast, for example, with a bar diagram." Thus, the '277 patent recognizes the possibility of using a bar diagram, but teaches against it as inferior to the circular shape set forth. Therefore, it would not have been obvious to one of ordinary skill in the art to combine the teachings of the '277 patent and the '258 patent.

Examiner's reply: Examiner disagrees. What a reference teaches or suggests must be examined in the context of the knowledge, skill, and reasoning ability of a skilled artisan. What a reference teaches a person of ordinary skill is not, as Applicant appears to believe, limited to what a reference specifically "talks about" or what is specifically "mentioned" or "written" in the reference.

Under the proper legal standard, a reference will teach away when it suggests that the developments flowing from its disclosures are unlikely to produce the objective of the applicant's invention. In *re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). A statement that a particular combination is not a preferred embodiment does not teach away absent clear discouragement of that combination. In *re Fulton*, 391 F.3d at 1199-1200.

Regarding the argument that the '277 patent recognizes the possibility of using a bar diagram, but teaches against it as inferior to the circular shape set forth is not an accurate depiction of the cited portion in its entirety. Streefkerk goes on to explain (Col. 2 lines 12-15) that the reason for not using a bar diagram is to eliminate the need for a user to "read text or numbers and even at a considerable distance can gain an idea of the values of the order processing time signals". The reference teaches the advantage is for the actual graphical images

to take the place of words and/or numbers present on many bar diagrams. Applicant's invention, although utilizing bar diagrams, encompasses the same inventive concept of using graphical images to take the place of words and/or numbers to allow a user to simply glance at the interface and get a general idea of processing times of the current and subsequent print jobs. Therefore, Streefkerk does not teach away from this concept and the combination is well within the reasoning of one of ordinary skill in the art for the intended purpose of the invention in its entirety.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMARES WASHINGTON whose telephone number is (571)270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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August 4, 2008